

Anatomy of the Human Body

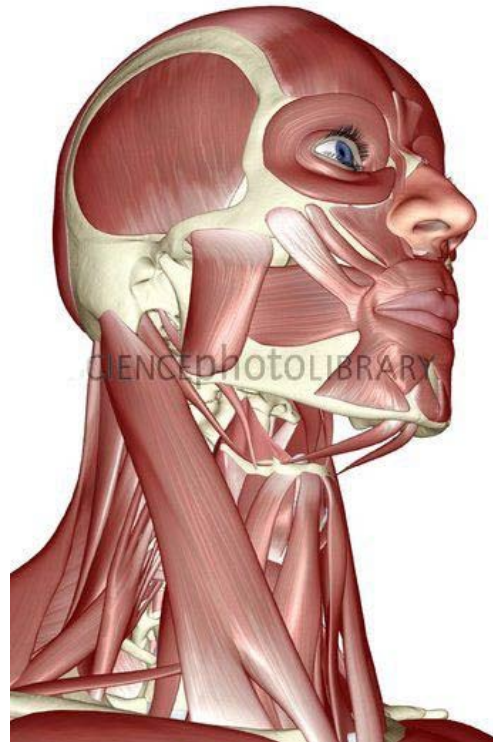
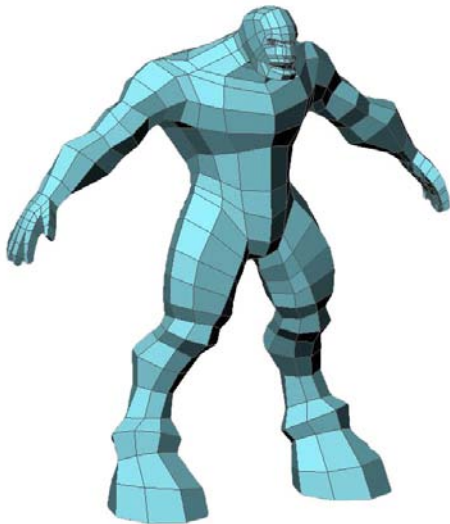
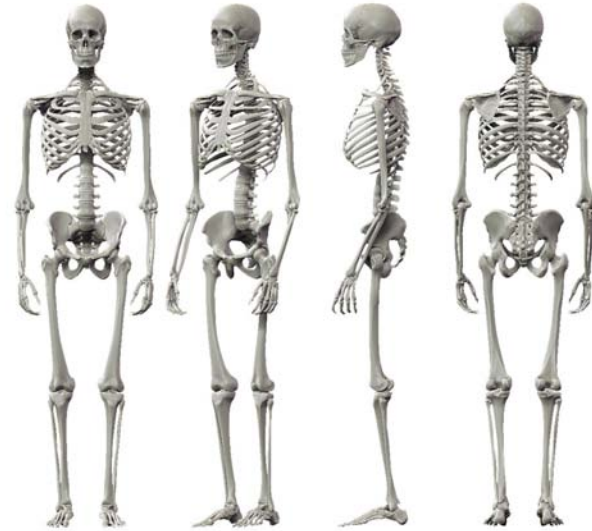
A Creature Sculptors Guide



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INTRODUCTION

This is a guide for the beginning creature sculptor. It illustrates the major muscle groups and surface features of the face and body. You will refer to this guide throughout the course. It is important that your creatures are anatomically believable. This means that the musculature must be correct and not just made up. Using this guide will start you on a stable path to understanding basic anatomy and sculpting convincing creatures.



OGRE GALLERY

Your first project is sculpting an ogre's portrait. Ogres are typically characterized by their harsh, bulky features. Their facial structures (nose, lips, ears, etc.) are all well defined. The creases in their faces are deep. The underlying skull may be radically different from that of an average human skull. The jaw might be larger. The supra orbital ridges and zygomatic arch might protrude. So don't let the plaster skull inhibit you. It's just a starting point.

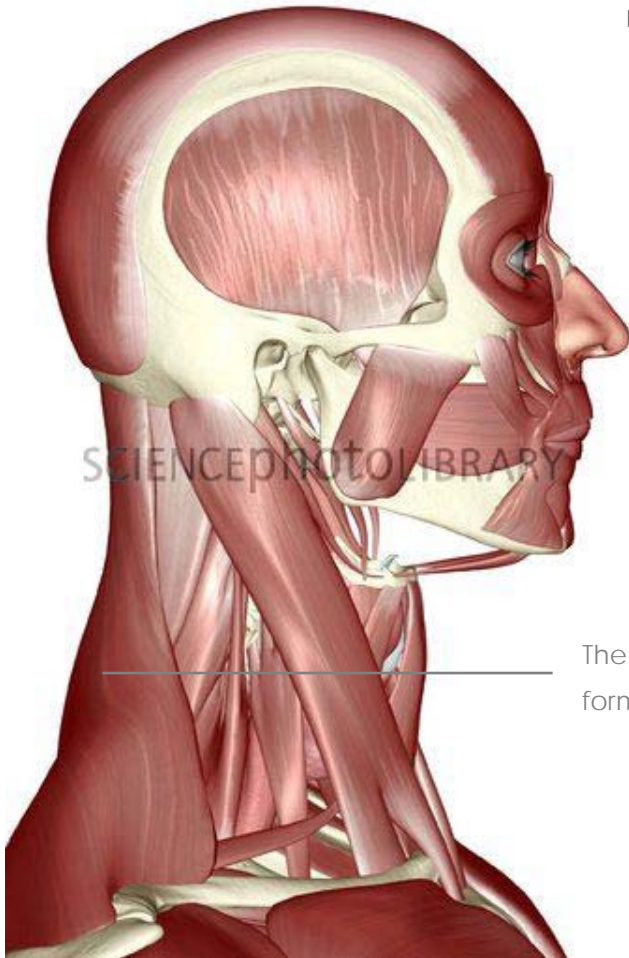


■ Head & Neck

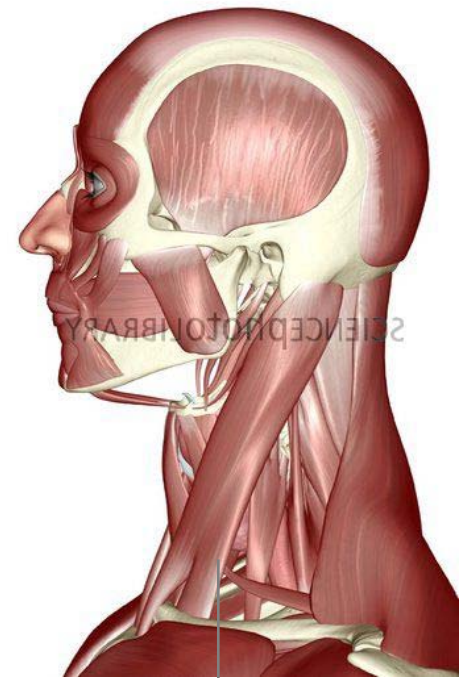
FACIAL ANATOMY

The muscles of the face are known as the “Mimic” muscles: meaning they create facial expressions.

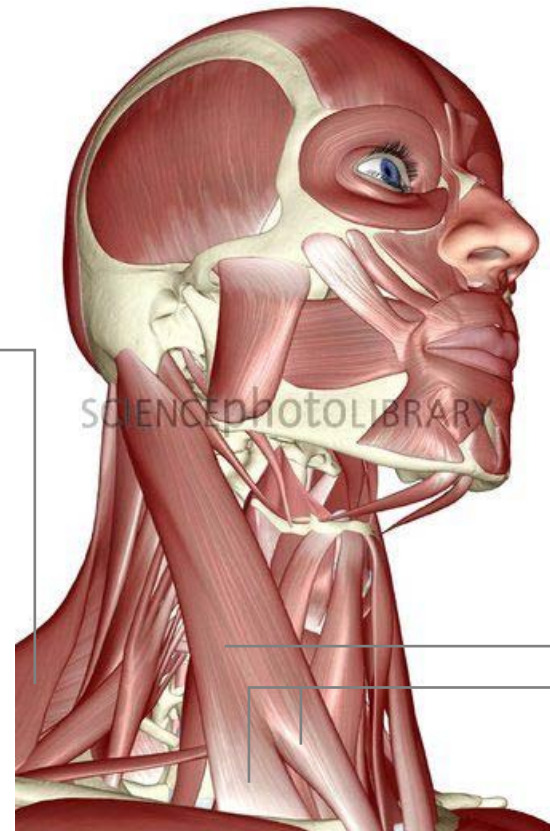
The neck is dominated in the front by the sterno-cleido-mastoid muscle. It begins at the mastoid process on the skull, just behind the ear and then separates into two heads and inserts on the clavicle and sternum.



The back of the neck is formed by the trapezius.



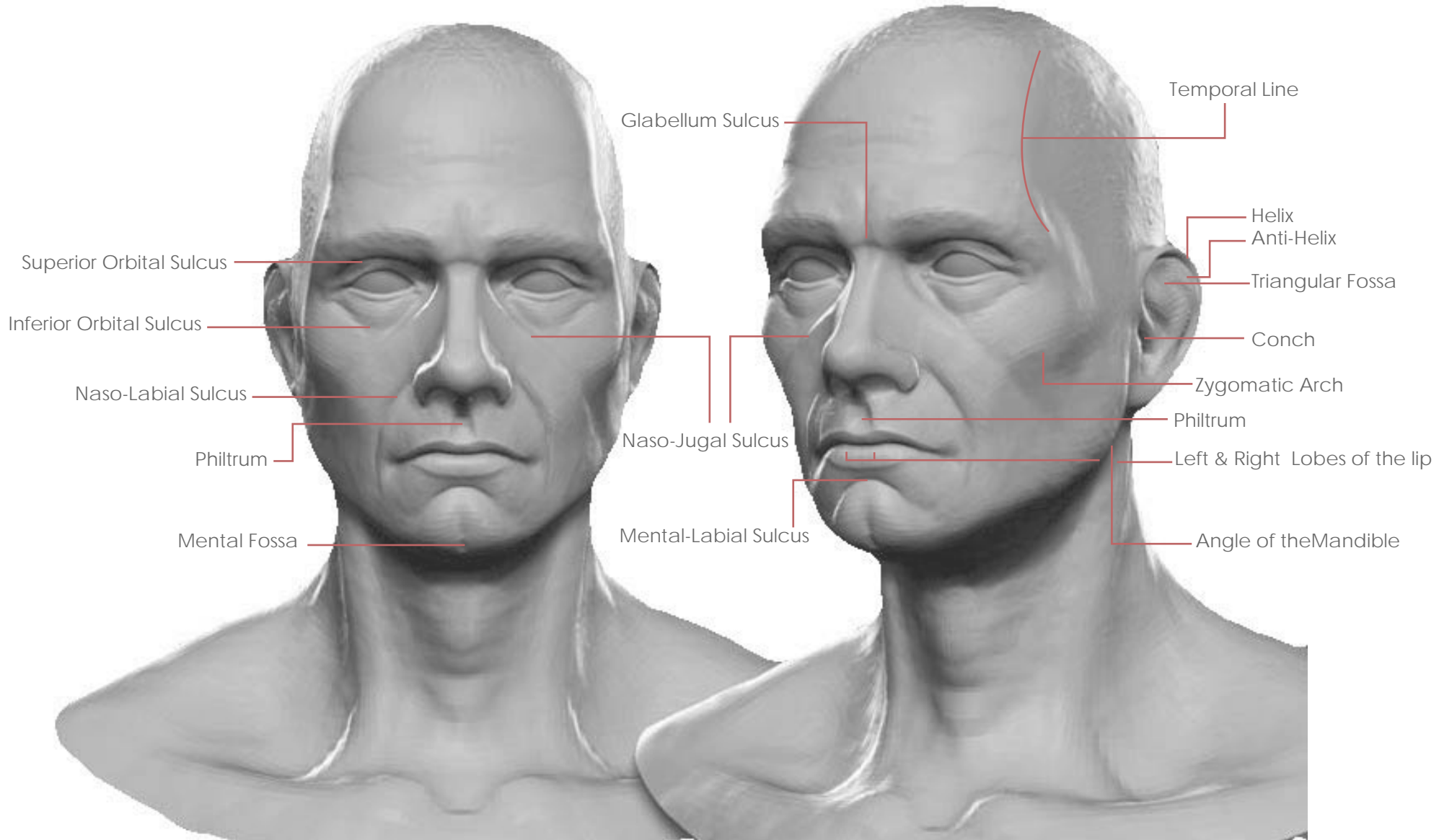
The Front of the neck is formed by the Sterno-Cleido-Mastoid



The Sterno-Cleido-Mastoid splits into two heads.

OGRE PORTRAIT

Below is a diagram showing the important surface landmarks on a human face. These surface details create personality and interest. Your ogre portrait should include most of these landmarks. Without them, your sculpture will look bland and uninteresting.



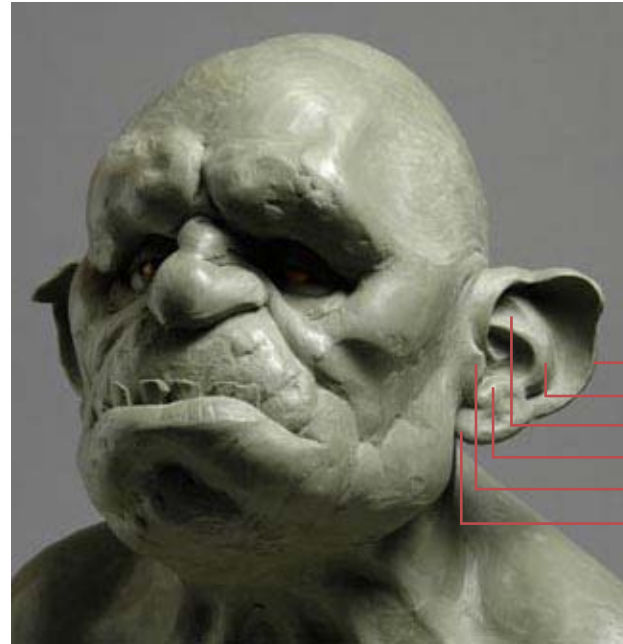
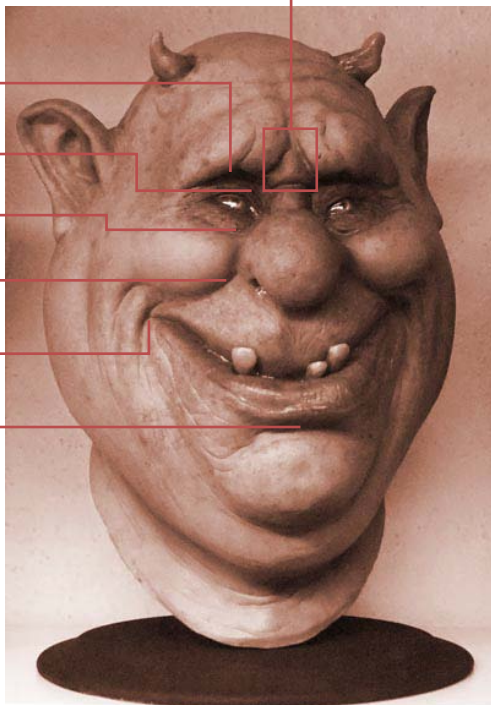
IMPORTANT FEATURES TO INCLUDE

PRIMARY FOLDS

These are folds made when two major features collide together. Example, when the upper lip meets the cheek, the Naso-Labial Fold is formed.

GLABELLUM FOLDS

- Epicanthic Fold
- Superior Orbital Fold
- Inferior Orbital Fold
- Naso-Labial Fold
- Oral Commisure Fold
- Mental-Labial Fold



EARS

The ear is not a random set of wrinkles. Almost all mammalian ears have common elements. They are:

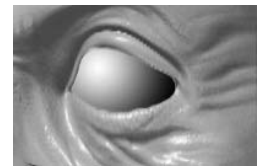
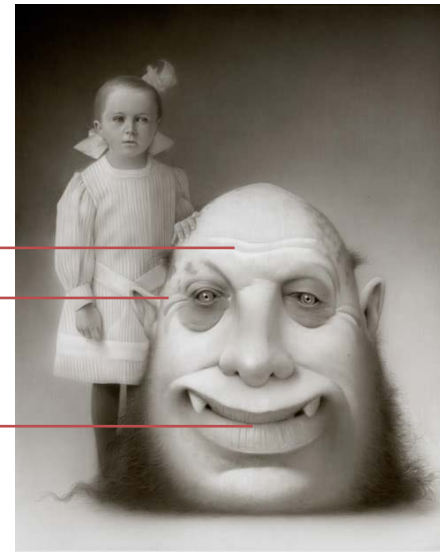
- Helix
- Anti-Helix
- Triangular Fossa
- Tragus
- Anti-Tragus
- Lobe

SECONDARY WRINKLES

Secondary wrinkles are different from primary folds. They tend to be caused by age and use.

Example, the wrinkles on the forehead and at the corners of the eyes comes as the creature ages.

- Forehead
- Corners of the eyes
- Lips



EYES

Eyes are particularly important. Eyes are the first feature noticed on a face. It is important that they be round and the eyelids curve about this roundness. The corners must be well defined and crisp.

CREATURE HANDS



OGRE SCULPTURE - FULL FIGURE

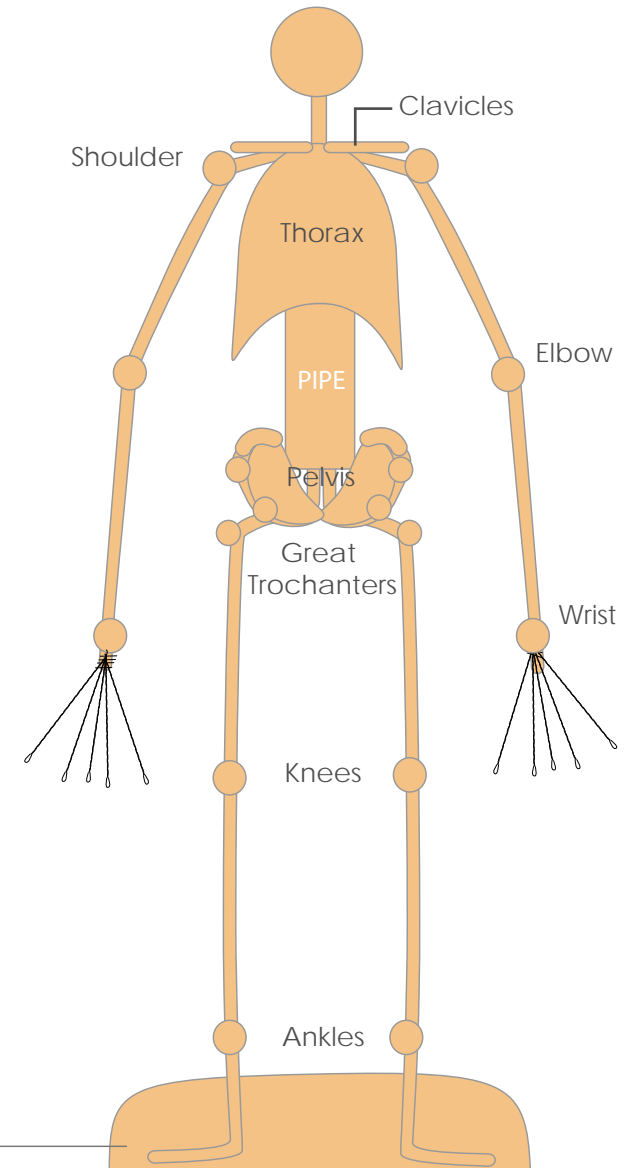
Your **second project** is a small (approx 12 inches) ogre sculpture. This is called a "maquette" in the industry. The figure is to be a male. Excepting a loin cloth and/or minor elements like wrist bands, the figure will be nude. It will be in a neutral position as shown in the examples below. The purpose is to display your creativity and knowledge of vertebrate muscle structure.

The first step is bending the armature to fit the proportions of your ogre concept.

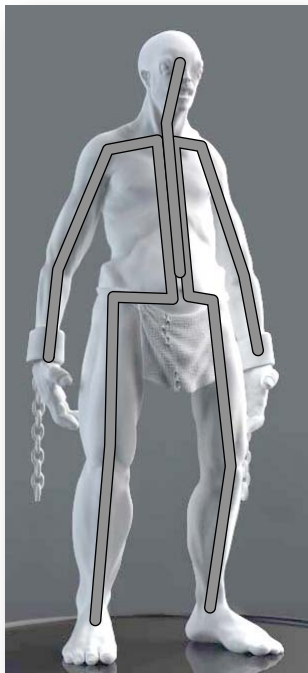


The second step is applying clay and modeling something like a skeleton.

1. Apply a thin layer of clay over the entire armature.
2. Place a small ball of clay at all joints: shoulder, elbow, wrist, knee, ankle. These are where most of the muscles attach.
3. Make a "Thorax" (rib cage).
4. Make two clavicles.
5. Make a Pelvis (hip bones).
6. Put clay balls on Sup. Iliac Spines and Great Trochanters to act as markers.
7. Indicate the head with a small ball of clay.
8. The hands are made separately using thin wire.



If the leg wire is too long, you can bend it up



IMPORTANT ELEMENTS TO INCLUDE

AREAS OF REVEALED SKELETON

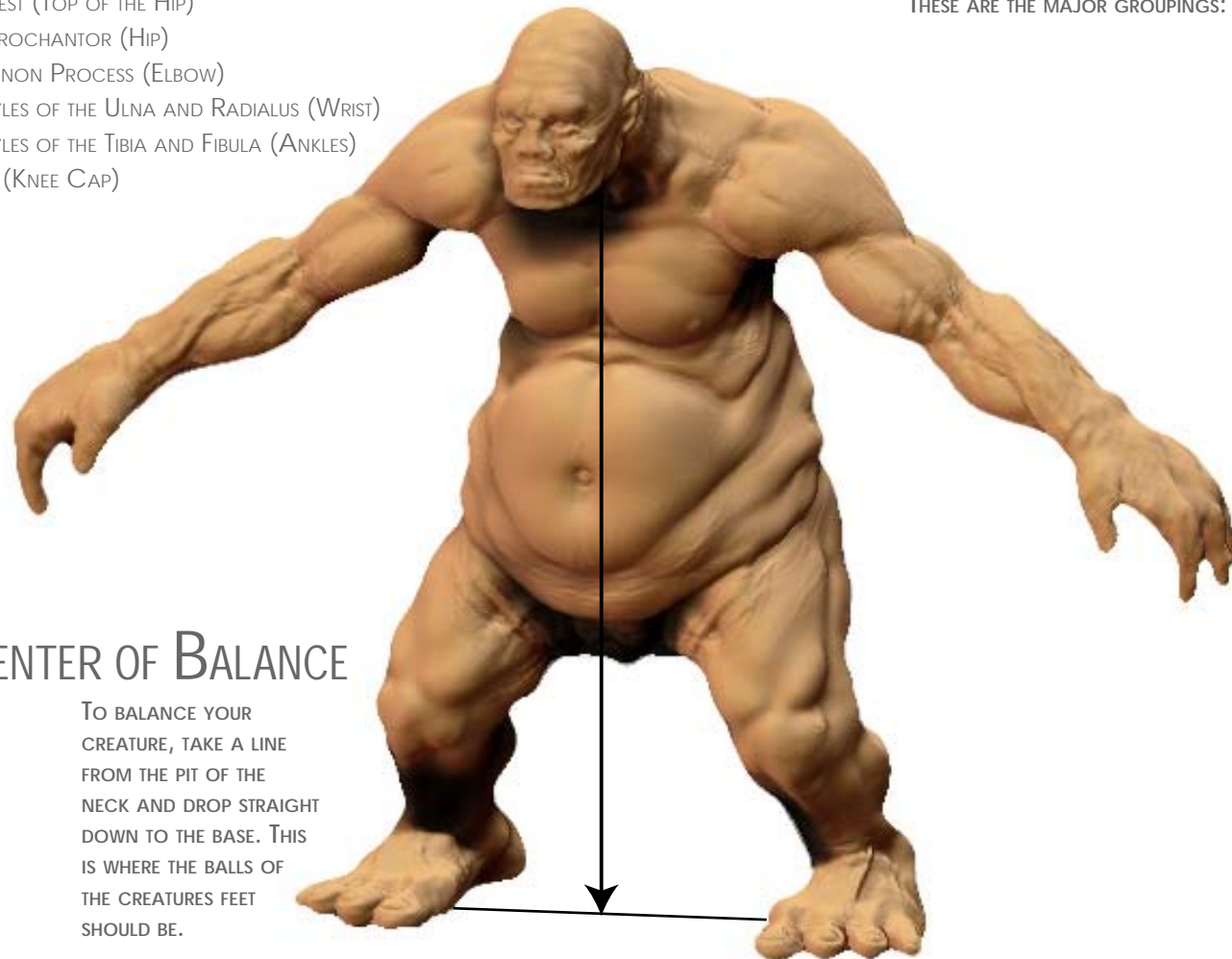
NO MATTER HOW OBESE OR MUSCULAR A PERSON (OGRE) IS, THERE ARE CERTAIN SPOTS ON THE FIGURE WHERE THE SKELETON REMAINS CLOSE TO THE SURFACE. NO FAT OR MUSCLE COVER THESE AREAS. THESE ARE OFTEN PLACES WHERE THE TENDONS OF THE MUSCLES ARE ATTACHED.



- CLAVICLES (COLLAR BONES)
- ACROMION PROCESS (TOP OF THE SHOULDER)
- ILIAC CREST (TOP OF THE HIP)
- LESSER TROCHANTOR (HIP)
- OLECRONON PROCESS (ELBOW)
- EPICODYLES OF THE ULNA AND RADIALUS (WRIST)
- EPICODYLES OF THE TIBIA AND FIBULA (ANKLES)
- PATELLA (KNEE CAP)

CENTER OF BALANCE

TO BALANCE YOUR CREATURE, TAKE A LINE FROM THE PIT OF THE NECK AND DROP STRAIGHT DOWN TO THE BASE. THIS IS WHERE THE BALLS OF THE CREATURES FEET SHOULD BE.



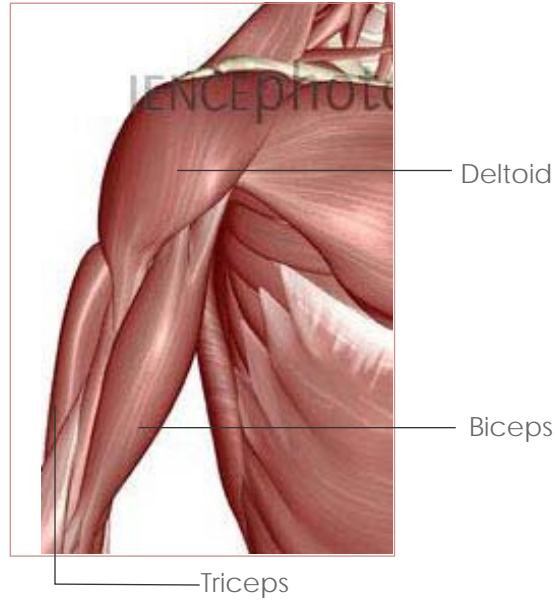
WELL DEFINED ANATOMY

THE FIGURE IS COMPOSED OF SOME 640 MUSCLES COVERED BY FAT AND SKIN TISSUE. FORTUNATELY, WE AS SCULPTORS NEED BE CONCERNED WITH ONLY

YOUR OGRE FIGURE MUST SHOW THESE MUSCLE AND MUSCLE GROUPS.

- THESE ARE THE MAJOR GROUPINGS:
- NECK
 - SHOULDER
 - CHEST
 - UPPER ARM EXTENSORS
 - UPPER ARM FLEXORS
 - LOWER ARM
 - UPPER LEG EXTENSORS
 - LEG ADDUCTORS
 - UPPER LEG FLEXORS
 - LOWER LEG FLEXORS
 - LOWER LEG EXTENSORS

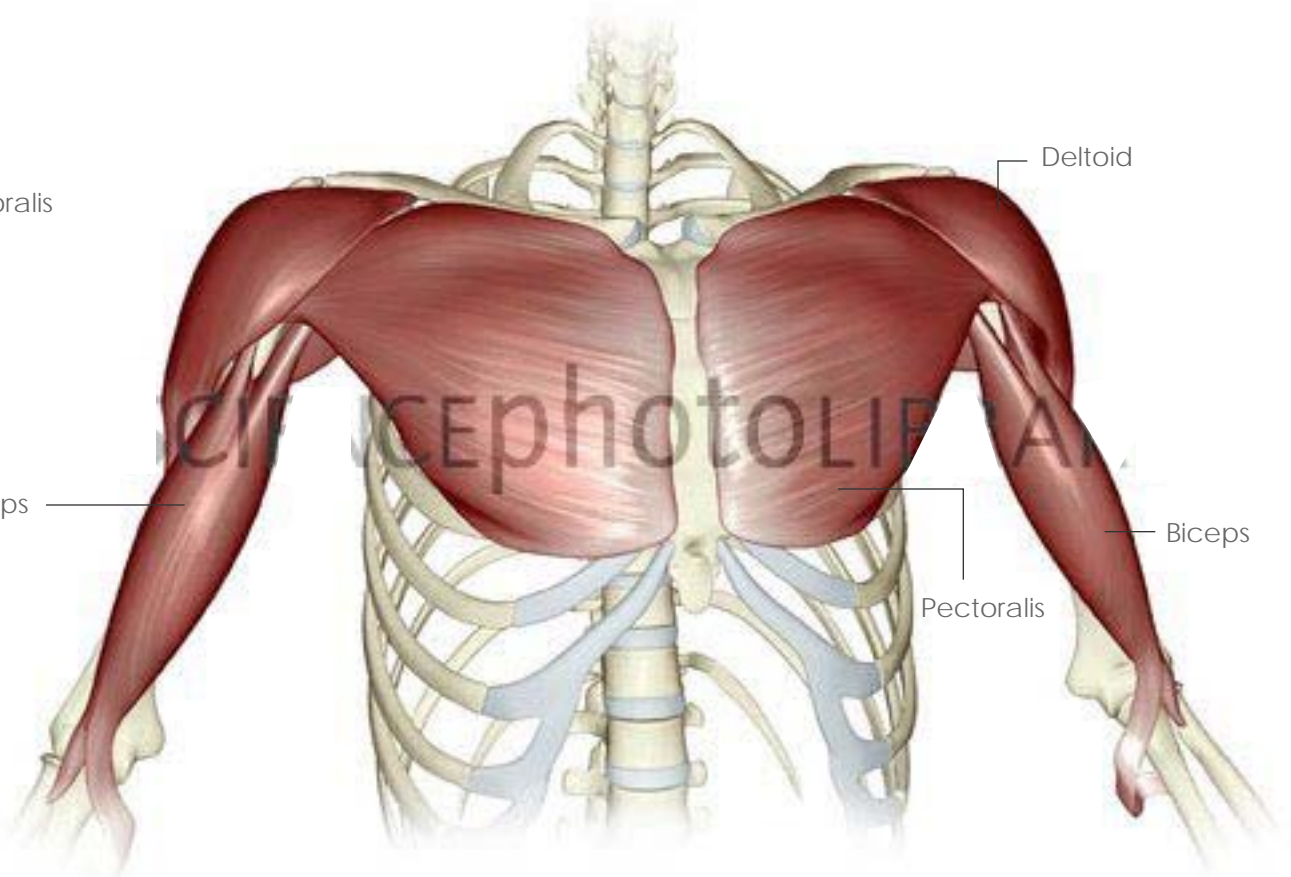
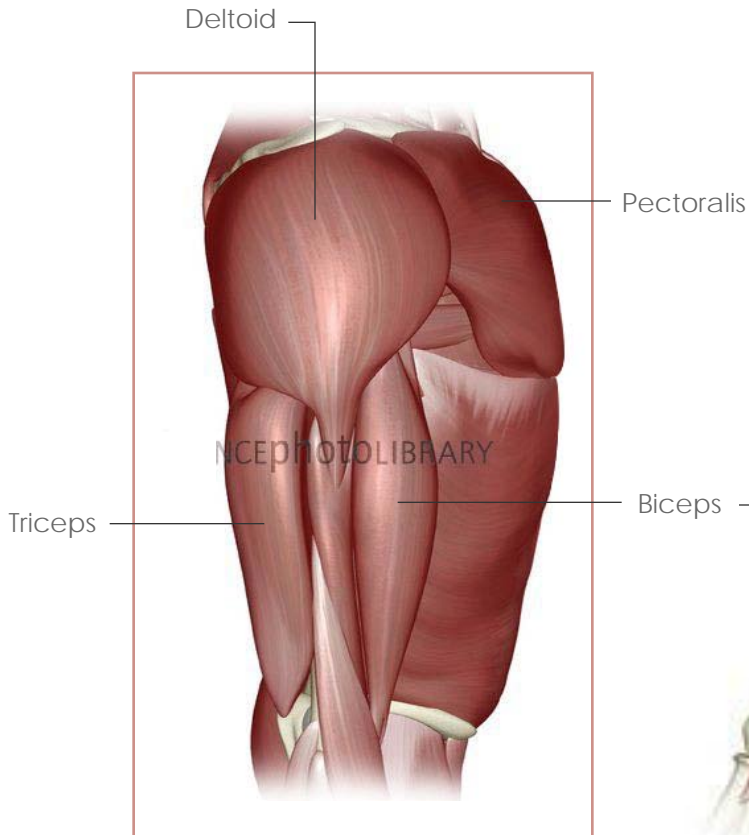
- Chest
- Shoulder
- Upper Arm



The upper arms, shoulder & chest are good places to start when sculpting the musculature of your creature.

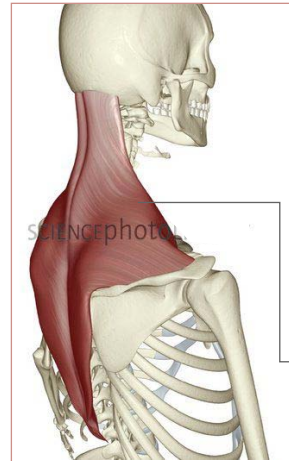
Sculpt the muscles in this order:

- Pectoralis
- Biceps
- Triceps
- Deltoid

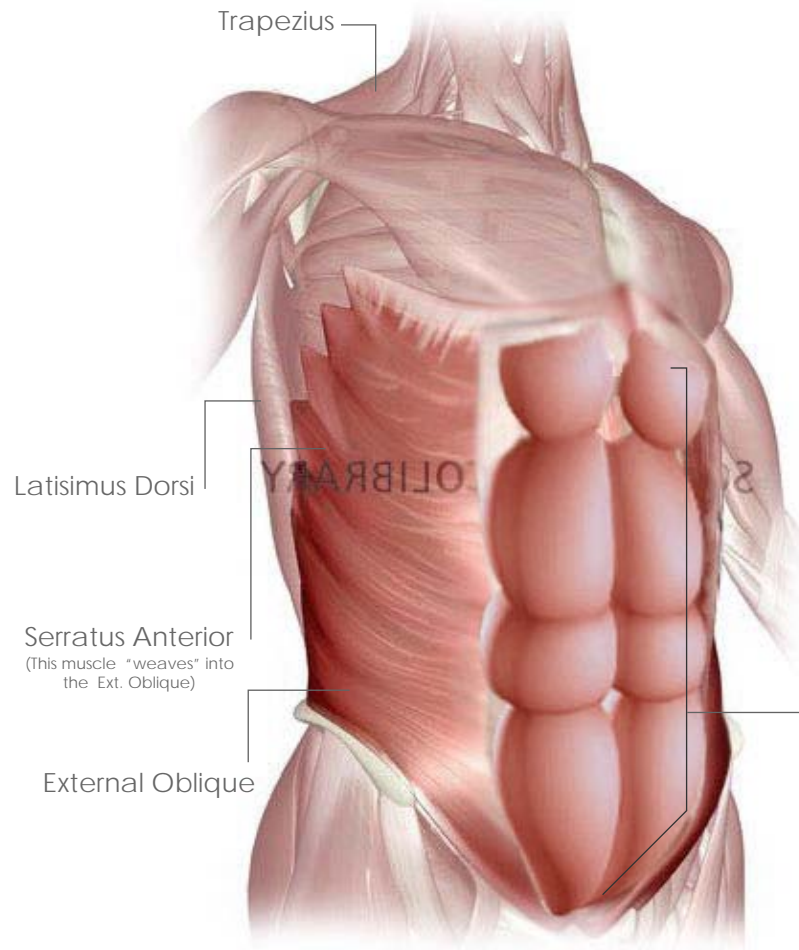


- Stomach
- Sides
- Back

Muscles of the stomach merge into each other often making them difficult to distinguish from one and another.



Trapezius



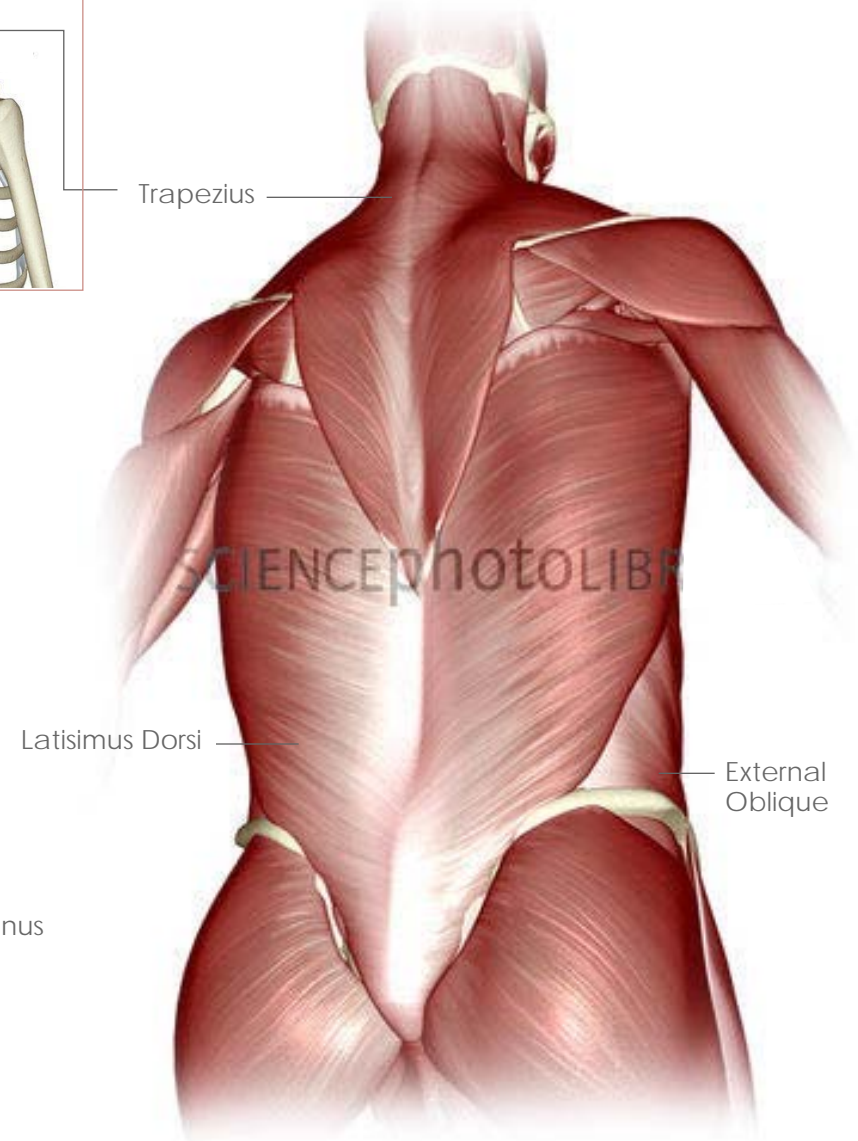
Trapezius

Latisimus Dorsi

Serratus Anterior
(This muscle "weaves" into
the Ext. Oblique)

External Oblique

Rectis Abdominus



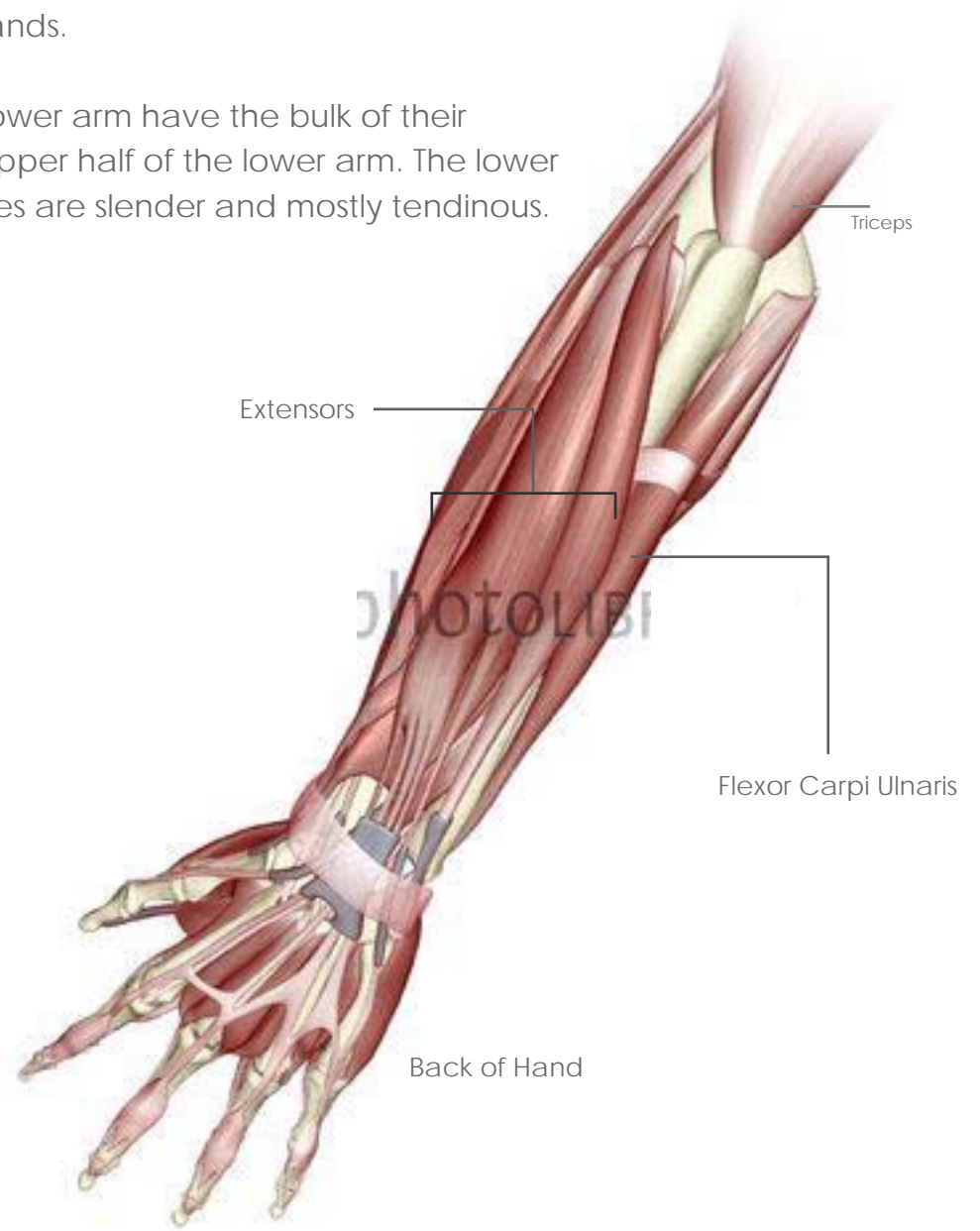
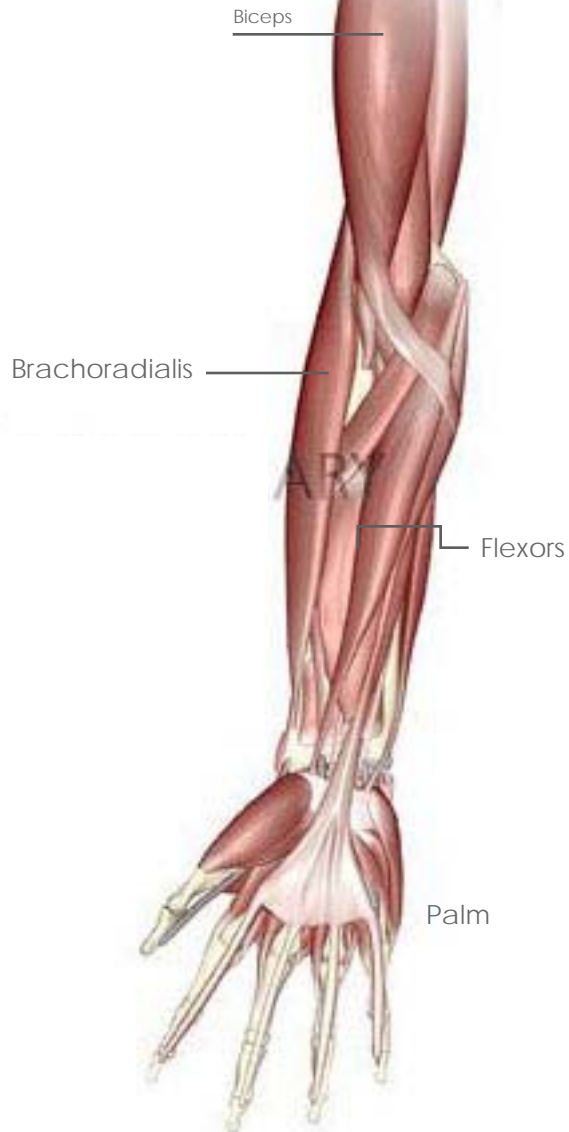
Latisimus Dorsi

External
Oblique

■ Lower Arm

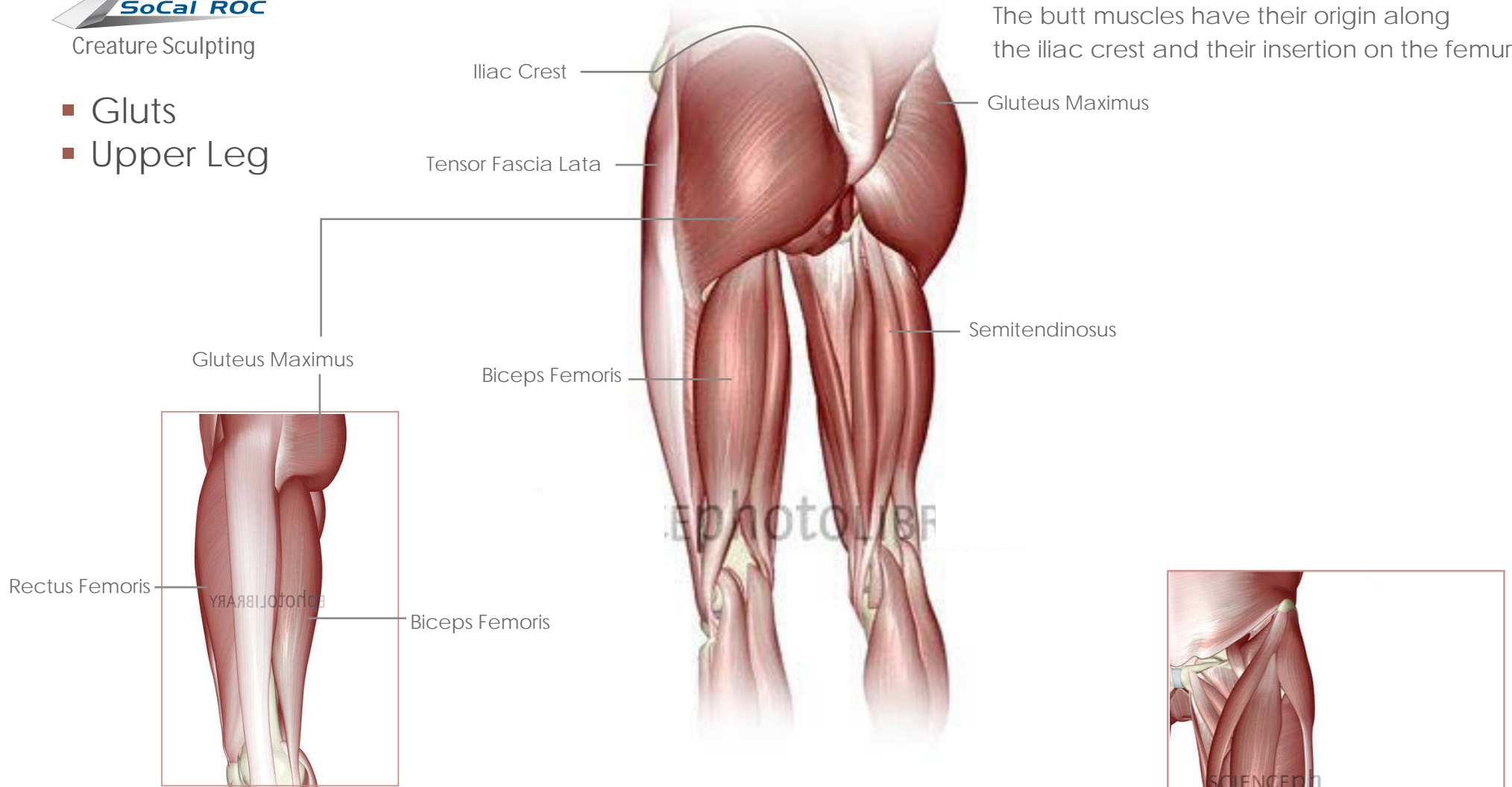
The lower arm muscles form a complex system allowing for movement of the hands.

The muscles of the lower arm have the bulk of their "meatiness" in the upper half of the lower arm. The lower parts of these muscles are slender and mostly tendinous.

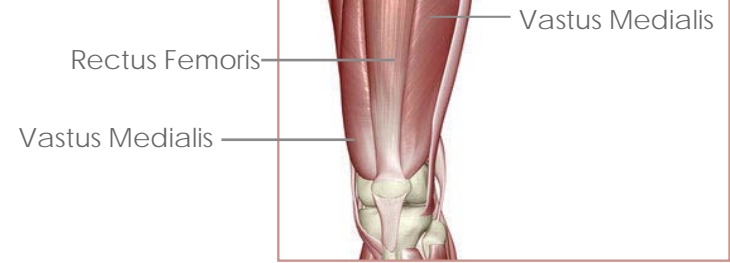


- Gluts
- Upper Leg

The butt muscles have their origin along the iliac crest and their insertion on the femur



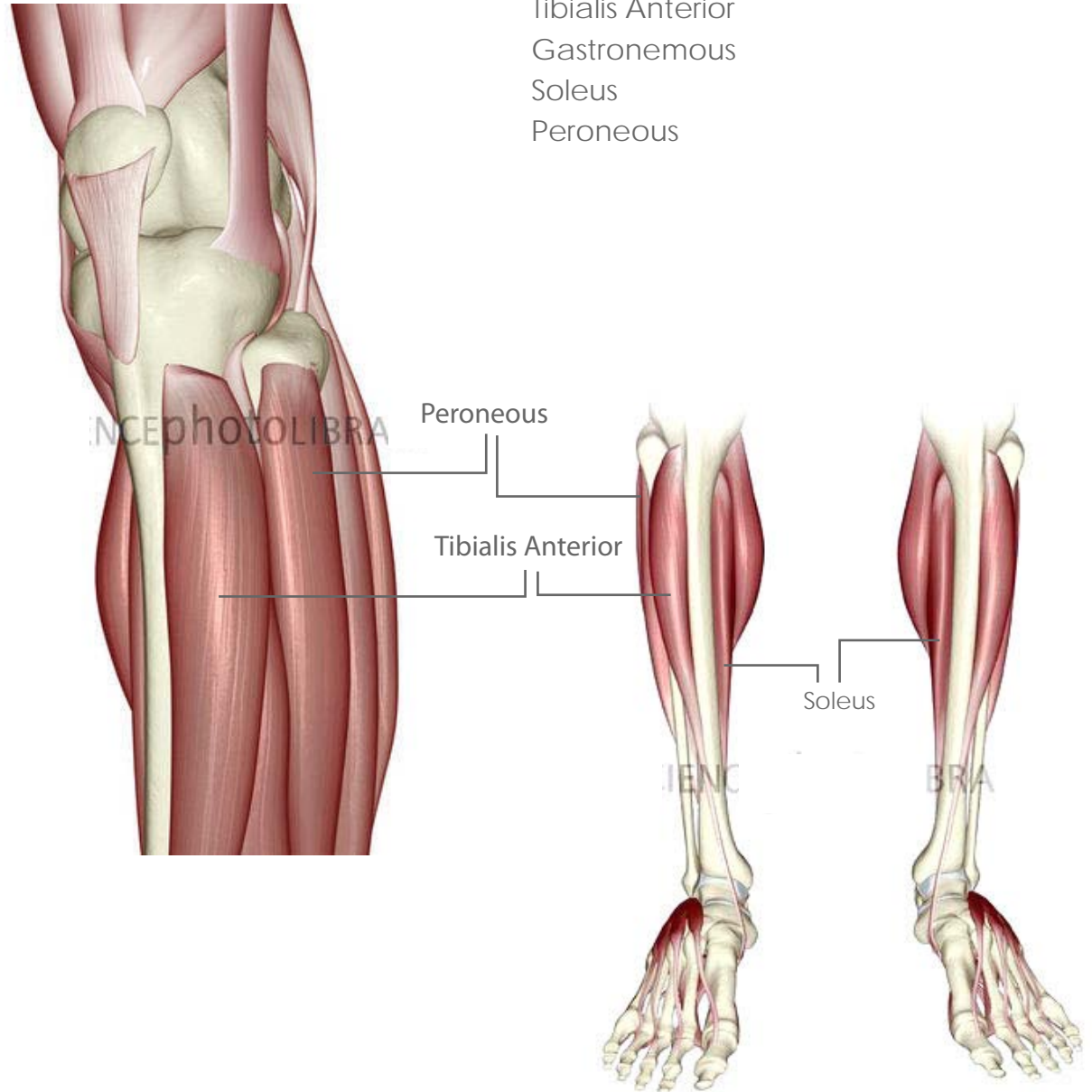
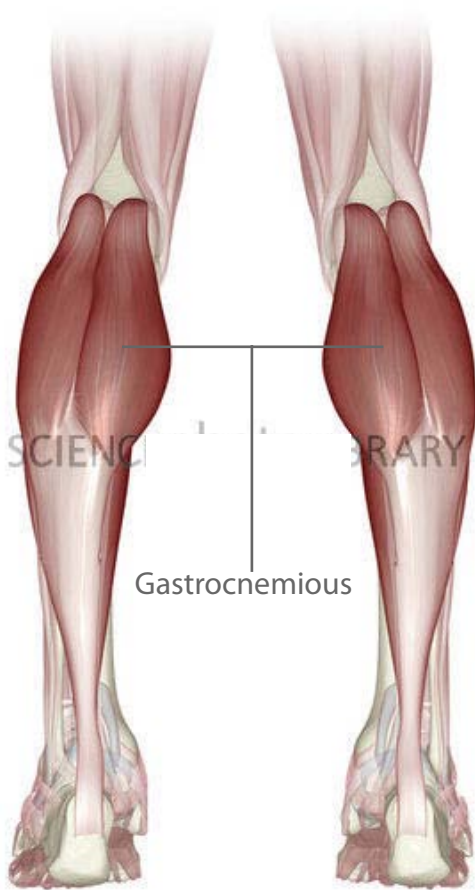
The muscles of the upper leg have their origin on the pelvis and the upper part of the femur.
 They insert along the femur, the tibia and fibula.



■ Lower Leg

The primary function of the lower leg muscles are to move the foot. For the sculptor the important muscles to note are:

- Tibialis Anterior
- Gastrocnemius
- Soleus
- Peroneous



SKELETAL TERMINOLOGY

